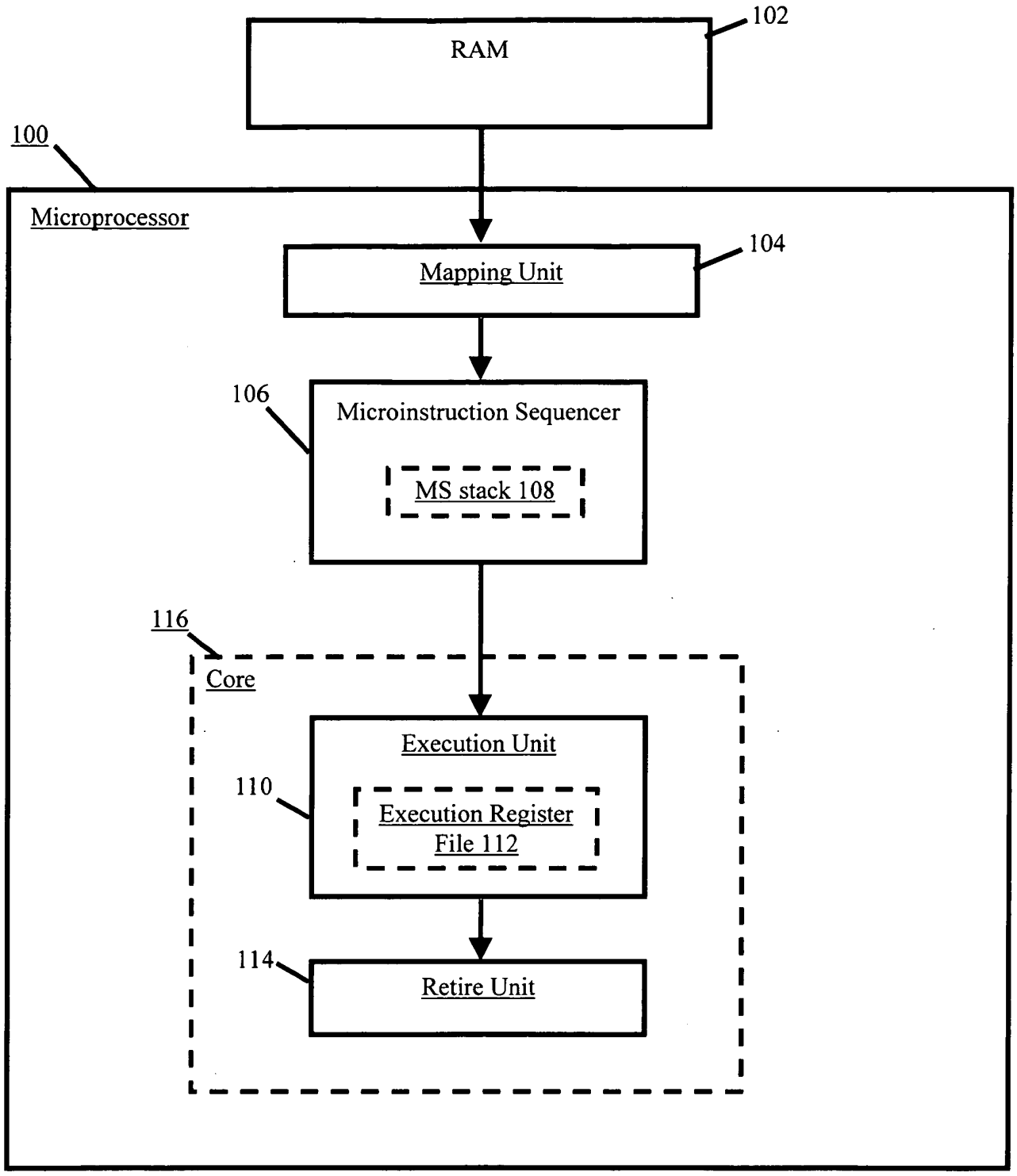
RAM
102
100
Microprocessor
Mapping Unit
104
106
Microinstruction Sequencer
MS stack 108
116
Core
Execution Unit
110
Execution Register File 112
114
Retire Unit

FIG. 1

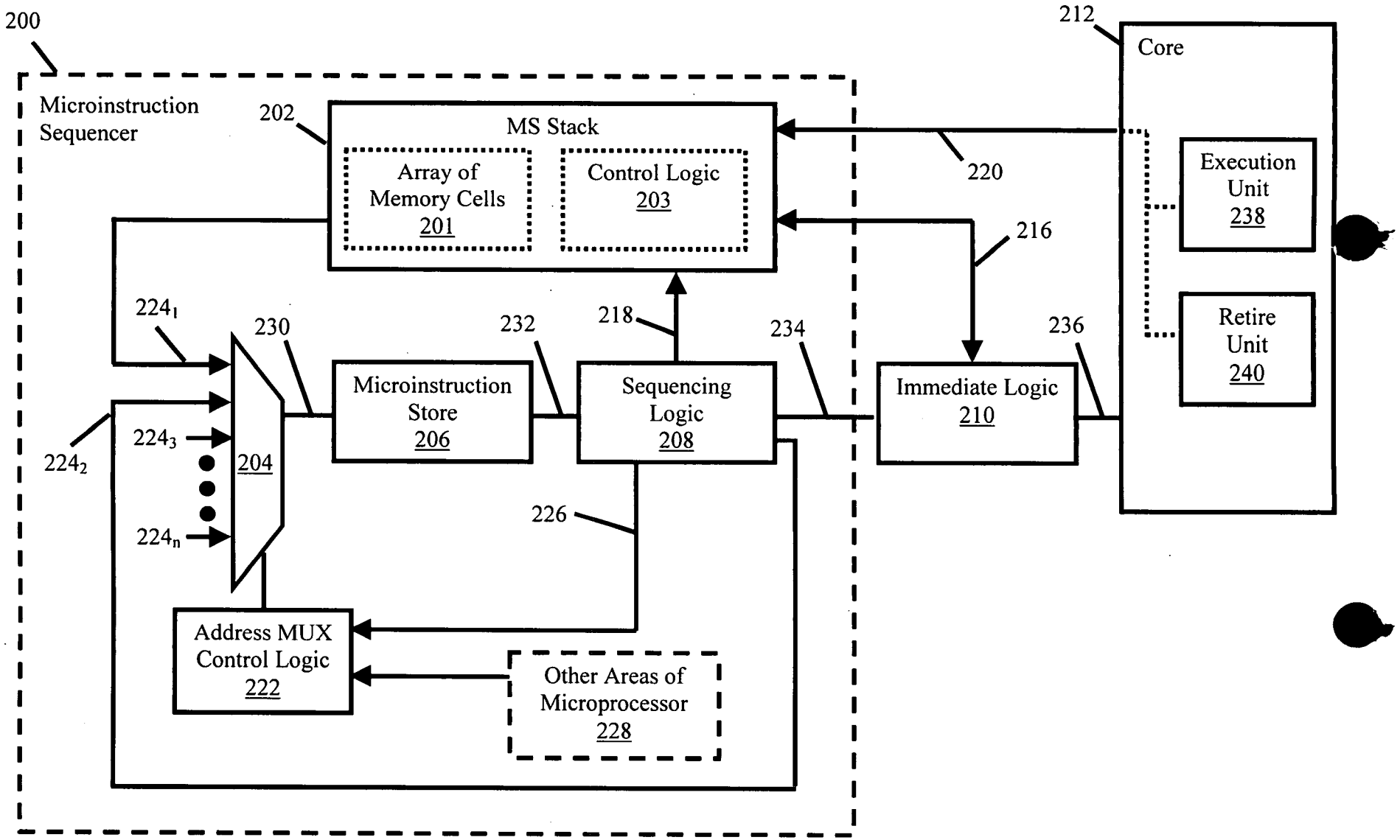
200
Microinstruction Sequencer
202
MS Stack
Array of Memory Cells 201
Control Logic 203
212
Core
220
Execution Unit 238
216
Retire Unit 240
224$_1$
230
232
218
234
236
Microinstruction Store 206
Sequencing Logic 208
Immediate Logic 210
224$_2$
224$_3$
204
224$_n$
226
Address MUX Control Logic 222
Other Areas of Microprocessor 228

FIG. 2

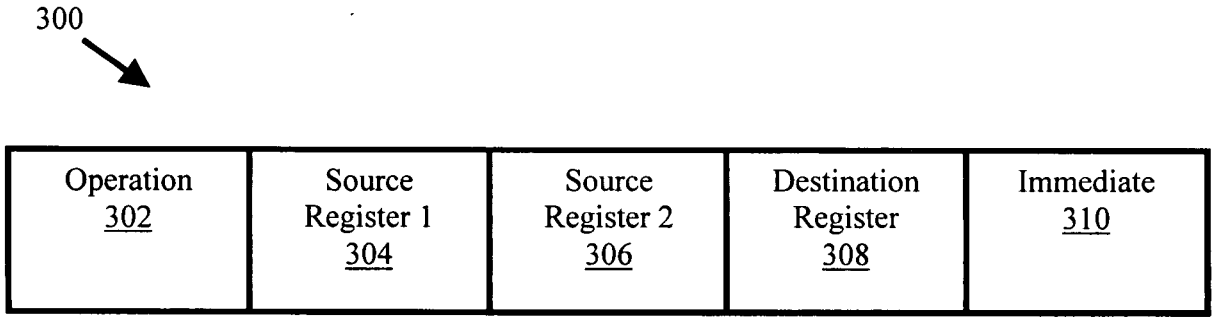
300
Operation
302
Source
Register 1
304
Source
Register 2
306
Destination
Register
308
Immediate
310

FIG. 3A

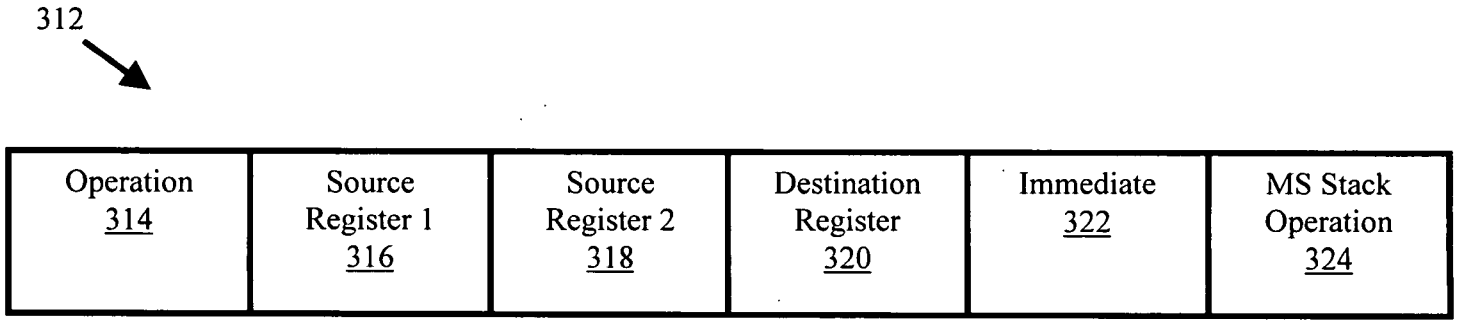
312
Operation
314
Source
Register 1
316
Source
Register 2
318
Destination
Register
320
Immediate
322
MS Stack
Operation
324

FIG. 3B

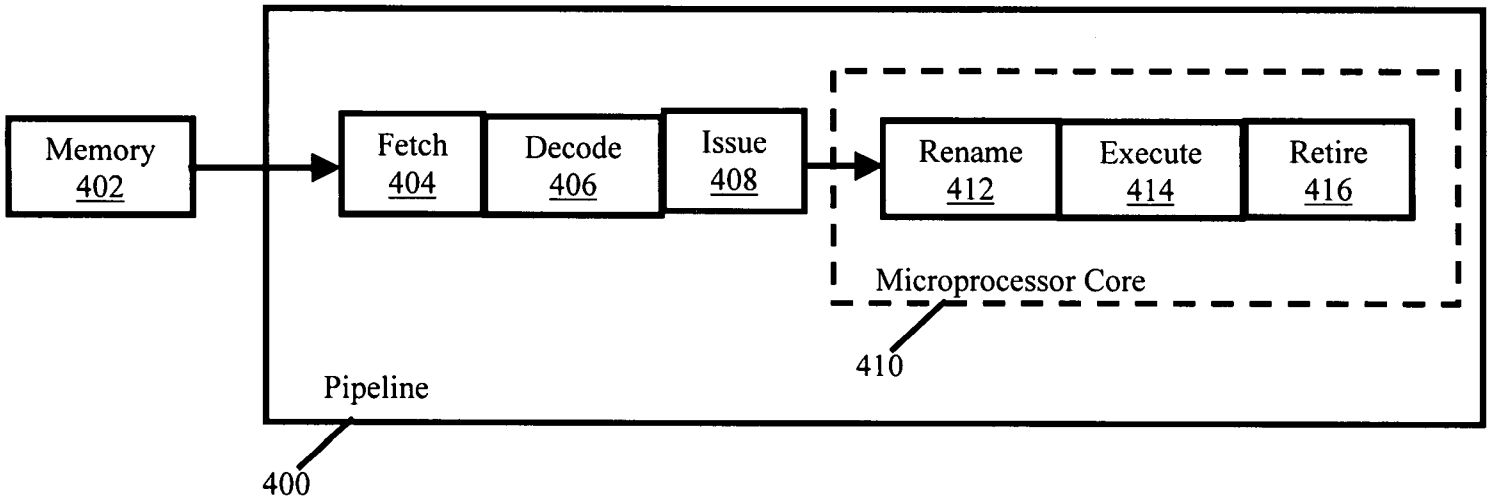
Memory
402
Fetch
404
Decode
406
Issue
408
Rename
412
Execute
414
Retire
416
Microprocessor Core
410
Pipeline
400

FIG. 4